2.0 INTRODUCTION

2.1 DEIR Organization

The organization of the Gloucester Harbor DMMP DEIR follows the framework established in MEPA to fully explore alternatives, and is organized into the following sections (see Figure 2-1).

<u>Section 1.0 - Executive Summary</u>, summarizes the report contents, lists the principal environmental impacts of the alternatives and identifies mitigation measures to be implemented to mitigate unavoidable environmental impacts. This section also indicates the steps that will be taken prior to developing a FEIR.

<u>Section 2.0 - Introduction</u>, presents the reader with the background of the DMMP planning process, MEPA procedural history and a summary of "scoping" and coordination involved in developing this DEIR. This section also highlights the process of how issues of concern, identified by public input and agency review, through the DMMP process have been identified and incorporated.

<u>Section 3.0 - Purpose and Need</u>, details the project's purpose, and discusses the need for the project, the relationship between the DMMP with the Gloucester Harbor port planning process, and a discussion of sediment quality and quantity. This section identifies the planning volumes of UDM that will be used as the required capacity baseline for this DEIR.

<u>Section 4.0 - Alternatives Analysis</u>, outlines the application of the DMMP disposal site screening process and criteria. This section presents the evaluation of potential impacts and benefits associated with the candidate sites or alternative treatment methodologies. This section details the potential impacts on specific resources in the vicinity of the disposal sites and in the case of alternative technologies, potential side-stream impacts associated with the implementation of specific treatment options.

<u>Section 5.0 - Affected Environment</u>, is a detailed description of affected environments in the vicinity of the aquatic and upland candidate disposal sites. This section presents a discussion of environmental and cultural resources which will be affected by the alternatives for UDM disposal, providing a baseline against which the impacts of disposal alternatives described in Section 4.0 can be analyzed in Section 6.0.

<u>Section 6.0 - Environmental Consequences</u>, evaluates, in detail, the potential impacts associated with implementation of the preferred alternatives for upland and aquatic disposal. This section outlines the cultural and environmental impacts of aquatic disposal alternative G-Cell-1, G-Cell-2, G-Cell-3 and G-Cell-4. Also contained in this Section is a discussion of secondary impacts from anticipated dredging projects for potential impacts to wetland resources.

<u>Section 7.0 - Compliance with Regulatory Standards</u>, is an overview of the current regulatory framework under which disposal of UDM occurs. This section describes the applicable regulations associated with implementing the Preferred Alternatives.

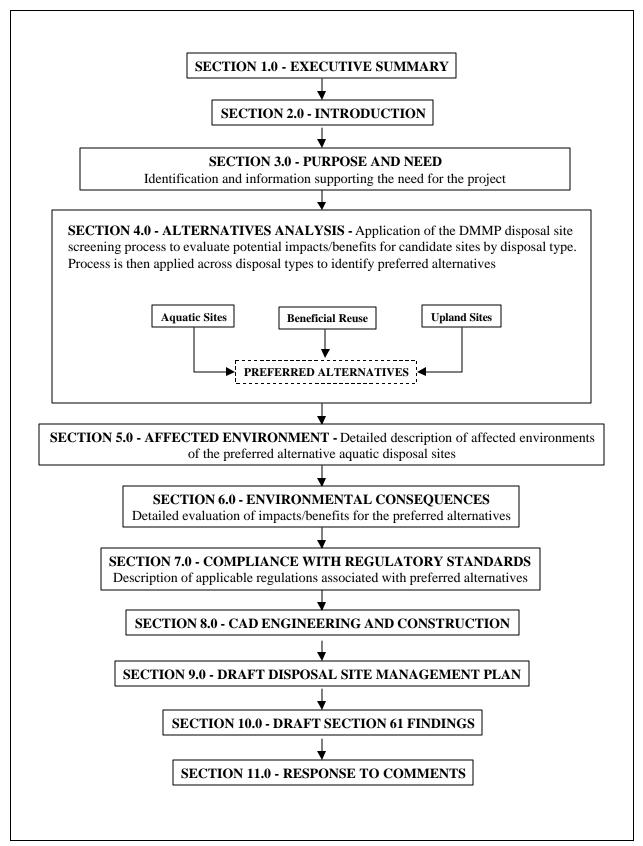


Figure 2-1: Gloucester Harbor DMMP DEIR organizational chart

<u>Section 8.0 - CAD Engineering and Construction</u>, this section describes the basis for conceptual engineering for CAD disposal of Gloucester Harbor UDM and a description of potential construction sequencing associated with the implementation of the aquatic preferred alternative, as identified in this DEIR. Included in the discussion of the construction measures are the steps necessary to minimize negative environmental impacts associated with the disposal of UDM in the marine environment.

<u>Section 9.0 - Draft Disposal Site Management Plan</u>, discusses the issues of monitoring the Preferred Alternatives for long-term environmental impacts and the management of operations for each disposal site. Management options discussed include experiences in other jurisdictions, general liability issues, fees, financing and general operation.

<u>Section 10.0 - Draft Section 61 Findings</u>, are included as required by MEPA, to outline whether the implementation of the Preferred Alternatives is likely to cause either direct or indirect damage to the environment. This section makes findings describing potential environmental impacts confirming that all practicable measures have been taken to avoid or minimize potential damage to the environment.

<u>Section 11.0 - Response to Comments</u>, is a comment by comment response to correspondence received by the MEPA Office regarding the Gloucester Harbor DMMP ENF. The DEIR contains a copy of each comment in a separate appendix. Comments within the MEPA scope are addressed and restated in this section, followed by a response. This section addresses all agency and public comments received.

The structure and content of the Gloucester Harbor DMMP DEIR is directly controlled by three primary sets of regulations. At the state level, the MEPA Scope that identifies the information that must be evaluated as part of the site identification process. This outline will ensure that the requirements of the state's environmental policies are met. At the federal level, the DEIR is subject to the provisions of Section 404 of the Clean Water Act (Section 404), and to the National Environmental Policy Act (NEPA). The Section 404 and NEPA outlines will ensure meeting the requirements of federal environmental policies.

The first task, then, was to integrate the requirements of these three authorities. To do this, previous projects that have faced the same task were investigated. First, site selection processes used by the state to site the Cape Cod Disposal Site (MADEM Generic EIR, 1992), and by the USACE and Massport to site the disposal cells for the Boston Harbor Navigation Improvement Project (USACE & Massport Final EIR, 1996) were evaluated. Then, at the direction of the federal agencies, the process used more recently by the Corps of Engineers for the federal Providence River Navigation Project (USACE DEIR, 1998) was also examined. After extensive discussion with the state and federal agencies, the screening process chosen was modeled after the Providence River project, in large part because the federal agencies reviewing this DEIR have developed the Providence screening, and are therefore familiar with the logic of the document.

Thus, MCZM is using the Providence River document (with some modification to format) as the template for the outline and the logic of the screening process, and is overlaying the MEPA Scope, creating the substance of the document.

2.2 Gloucester Harbor

Gloucester Harbor is located on the northern shore of Massachusetts, approximately 25 miles northeast of Boston. The Harbor is the second largest fishing port in New England, second only to New Bedford, and is a major fish processing center. The Harbor contains numerous seafood dealers, fish processors, and associated businesses, including significant cold storage facilities, with the largest cold storage capacity on the East Coast. Gloucester Harbor also contains a sizable recreational boating fleet in the summer months, and marinas and businesses which support recreational boating. The Annisquam River, also considered in Gloucester Harbor for this report, is used heavily by recreational boaters, and contains a number of recreational marinas and related businesses. Gloucester Harbor and the Annisquam River contain a number of authorized federal dredging projects, including various channels and anchorage areas. (USACE 1996)

Geographically, the Harbor can be described as two distinct segments, the Inner and Outer Harbor (see Figure 2-2). The Harbor Plan describes the Inner Harbor consisting of the following primary areas: Harbor Cove, State Fish Pier, East Gloucester Waterfront, and Smith Cove. Adjacent to downtown, Harbor Cove is the traditional heart of Gloucester's fishing industry. This area is characterized by a mix of industrial and commercial uses, and older finger piers. The State Fish Pier area is devoted to maritime industrial uses. Uses along the East Gloucester Waterfront area contain a wide range of uses from homes to boatyards servicing recreational and fishing vessels. Dominated by residential and tourist commercial uses, the Smith Cove Area has attracted visitors to Gloucester for much of its history. The Western Harbor of the Outer Harbor includes the waters edge along Stacy Boulevard from the Fort to Fort Stage Park. The remainder of the Outer Harbor area is generally characterized by low density residential development on the eastern and western shores (Icon Architecture Inc., 1999).

Founded in 1623, Gloucester is the oldest fishing community in America and one of its most beautiful seaports. Situated on the northeastern coast of Massachusetts, Gloucester is a great import/export point for both Canadian and European ports of call. Direct connection to our interstate road system makes Gloucester the most accessible over-the-road port in Massachusetts. Effective inter-modal transport between all major Canadian and U.S. cities is a key feature of Gloucester's seaport.

Historically a fishing community, Gloucester gained notoriety and business when Clarence Birdseye invented frozen packaging of fish and other food products in 1925. Gloucester has developed into a major import center for frozen seafood products and currently maintains the largest cold storage port facilities of any U.S. port.

Gloucester is a port that concentrates on providing personalized service for small vessel owners. The harbor has two 300-foot vessel berths, one 600-foot berth, and one 800-foot berth. Available deep draft of 16-20 feet alongside the piers at mean low water and vessels of up to 300 feet in length can be accommodated. Ship cargoes are loaded and discharged on a tonnage basis seven days a week, 24 hours a day. Vessel turnaround time is generally very short.

Efforts are underway to revitalize the use of the city's harbor and diversify importing and exporting. Funds are being allocated for renovating the Gloucester State Pier to increase the number of berths and expand the harbor's capabilities.

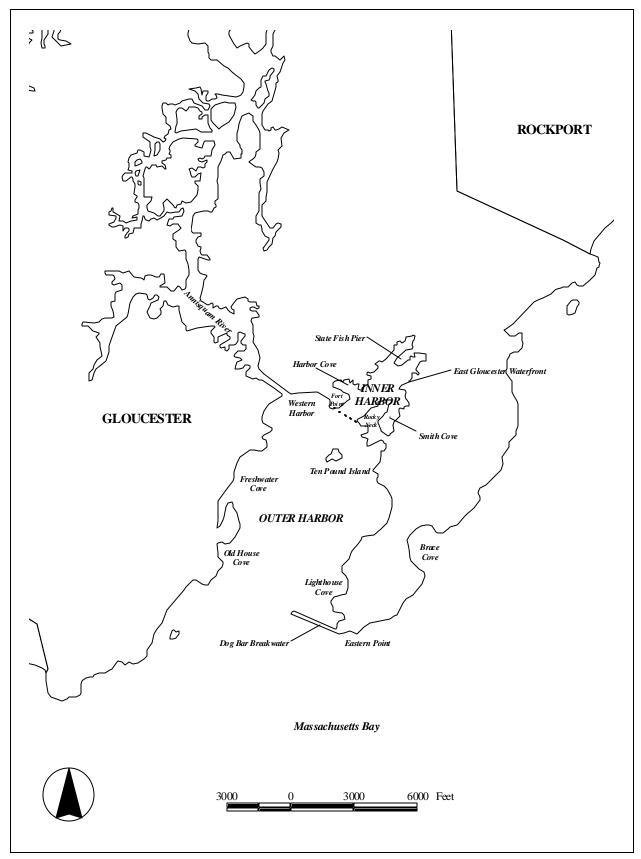


Figure 2-2: Gloucester Inner and Outer Harbor Areas

2.3 Background of the MCZM DMMP

The Executive Office of Environmental Affairs (EOEA), through its office of Coastal Zone Management (MCZM), is providing technical assistance to Gloucester in support of the City's harbor planning objectives through the development of a DMMP for Gloucester Harbor dredged sediments. The development of this Gloucester Harbor DMMP DEIR involved two project phases to address the critical issue of finding environmentally sound and cost effective disposal sites or methodologies for dredged material unsuitable for unconfined ocean disposal. The DMMP has a twenty year planning horizon.

To develop the DMMP, MCZM needed to do the following:

- Collect and analyze information on dredging needs, characteristics of the sediment, cultural and environmental resources and available alternatives for treatment, reuse, and disposal of dredged material from the Gloucester Harbor area for use in support of on-going port planning initiatives;
- Identify and characterize the range of reasonable alternatives for dredged material reuse/disposal and establish a framework for comparison of the alternatives as guidance for compliance with MEPA.

Phase I of the DMMP, conducted in 1996 and 1997, included several discrete tasks, the purpose of which was to provide a baseline assessment of existing conditions related to dredging and dredged material disposal for Gloucester. DMMP Phase I tasks were documented in a report (Maguire Group Inc., 1997a and b.) and included:

- <u>Summary Report</u> a synopsis of dredging volumes, sediment quality and potential disposal alternatives for Gloucester, Salem, New Bedford and Fall River Harbors;
- <u>Dredging Inventory</u> an update of the US Army Corps of Engineers inventory of dredging demand for Gloucester, Gloucester, New Bedford and Fall River Harbors;
- <u>Bathymetric Surveys</u> a review and compilation of existing bathymetric survey information in Gloucester, Gloucester, New Bedford and Fall River Harbors;
- <u>Alternative Technologies</u> an inventory and assessment of available treatment technologies for contaminated dredged material;
- <u>Natural Resource Inventory</u> an inventory of all known fish, shellfish and wildlife resources within Gloucester Sound and Gloucester, New Bedford and Fall River Harbors;
- <u>Aquatic and Near-Shore Disposal Site Analysis</u> an identification and description of potential confined aquatic disposal (CAD), confined disposal facility (CDF) and tidal habitat restoration sites within Salem, Gloucester, New Bedford and Fall River Harbors;
- <u>Upland Disposal Site Inventory</u> an examination of upland and reuse options for contaminated dredged sediments;

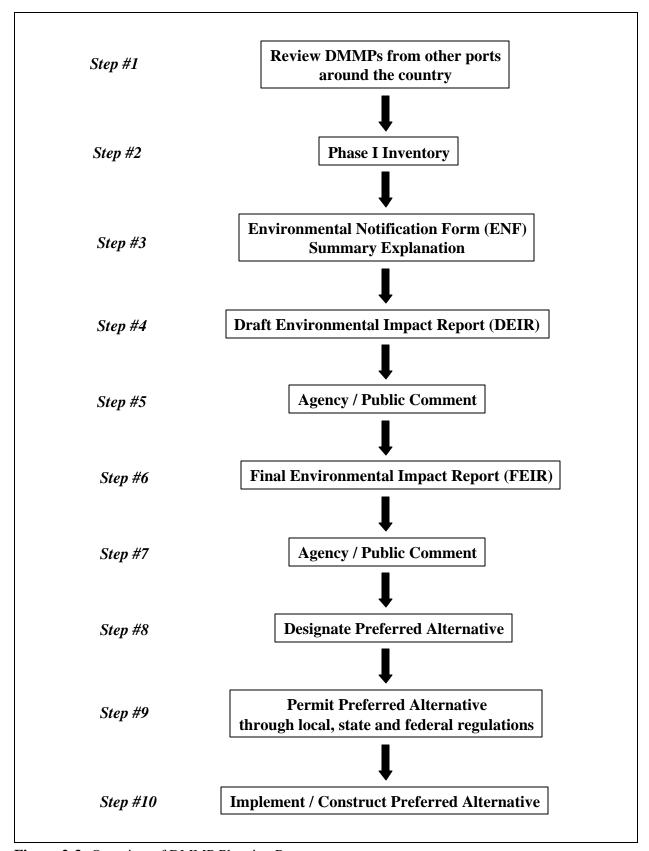


Figure 2-3: Overview of DMMP Planning Process

- <u>Due Diligence</u> an inventory and data description of pollution sources and historic sediment quality information in Salem, Gloucester, New Bedford and Fall River Harbors;
- <u>Preliminary Geotechnical Investigations</u> an inventory and assessment of existing geotechnical information within Salem, Gloucester, New Bedford and Fall River Harbors; and
- <u>Sampling Plans</u> develop sediment sampling and testing plan for Gloucester Harbor dredging projects.

The DMMP Phase I information was used to identify baseline conditions and data gaps, and served as the basis for the preparation of the MEPA ENF for the Gloucester Harbor DMMP.

Phase II of the DMMP has focused on conducting the field work, research, and analysis necessary to undertake a detailed assessment of the potential environmental impacts associated with the dredged material disposal alternative(s) identified through the DMMP process.

The purpose of the DMMP for Gloucester Harbor is to identify, evaluate and permit, within the Zone of Siting Feasibility (ZSF) for Gloucester Harbor, a dredged material disposal site(s) or methodology with sufficient capacity over the next twenty years to accept dredged material unsuitable for unconfined ocean disposal from public and private dredging projects.

The lack of a practicable cost-effective method for the disposal of UDM in an environmentally sound manner has been a long standing obstacle to the successful completion of dredging projects in Gloucester Harbor. The disposal alternative siting process has been closely coordinated with the City of Gloucester, through the Dredging Subcommittee.

The Dredging Subcommittee was established by the Gloucester Harbor Planning Committee to serve in an advisory capacity to represent the interests of the Committee throughout the development of the DMMP. Members of the Subcommittee included representatives of shipping and fishing interests, the Conservation Commission, the Harbormaster, and the State Pier.

Coordination with local port planning interests has also been a critical component of the development of the Gloucester Harbor DMMP DEIR. The simultaneous development of both the DMMP and the Gloucester Harbor Plan has aided the identification of the future dredging needs for the maintenance and improvement in navigation within Gloucester Harbor and with the identification of potential sites for the disposal of UDM.

This Gloucester Harbor DMMP DEIR identifies disposal alternatives with sufficient capacity to accept dredged material unsuitable for unconfined ocean disposal from public and private dredging projects.

2.4 Massachusetts Environmental Policy Act (MEPA) Procedural History

The submission of the ENF for the Gloucester DMMP on March 13, 1998, started the official MEPA review process for the DMMP (a copy of the ENF is included in Appendix A). On April 24, 1998, pursuant to the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and the MEPA Regulations (301 CMR 11.00), the Secretary of the Executive Office of Environmental Affairs (EOEA) made the determination that the Gloucester Harbor DMMP requires the preparation of an Environmental Impact Report (EIR). Because the project involves the potential alteration of more than ten acres of Land Under the Ocean (a resource area regulated under the Massachusetts Wetlands Protection Act, M.G.L. c. 131, s. 40) and involves the use of state agency funding through the Seaport Bond Bill (Chapter 28 of the Acts of 1996), the Gloucester Harbor DMMPs exceeded the "categorical inclusion" threshold at Section 11.25(2) of the MEPA regulations in effect in June 1998, requiring by regulation the preparation of an EIR. (Under the current MEPA Regulations, promulgated in July 1998, the Gloucester Harbor DMMP exceeds the 10-acre wetland resource area alteration "Mandatory EIR" threshold at 301 CMR 11.03(a)b. The Mandatory EIR thresholds contained in the July 1998 MEPA Regulations have replaced the Categorical Inclusion thresholds from previous versions of the MEPA regulations.)

2.5 Scoping and Coordination Summary

The MEPA public "scoping" meeting was held at Gloucester City Hall on April 9, 1998. The meeting was conducted by a representative of the MEPA Unit of the EOEA. At the meeting, the Gloucester Harbor DMMP, as described in the ENF, was presented and public comments were received by the MEPA Unit.

The Secretary's ENF Certificate of April 24, 1998 (included in the front matter of this DEIR), establishes the scope for this DEIR. In addition to the DEIR subject matter outline contained in Section 11.07 of the MEPA regulations, several major issues were emphasized as subjects to be addressed in this DEIR:

- Sediment quality and quantity analysis;
- Identification of disposal alternatives, including: alternative technologies and methodologies; upland reuse/disposal; and aquatic disposal;
- A complete description of the screening of disposal alternatives:
- Results of fisheries investigations and monitoring program;
- Effects on shore bird habitat;
- Results of cultural/historical/archaeological investigations;
- Characterization of proposed disposal sites;
- A description of the Preferred Alternative; and
- A proposed disposal site management plan;

2.5.1 Coordination with Harbor Planning Process

MCZM and the City of Gloucester sponsored a series of local presentations with topics related to dredging and dredged material management. The purpose of the presentation series was to provide a mechanism for citizens with an interest in Gloucester Harbor to provide input into the process of developing a preferred disposal alternative. MCZM also conducted a series of working meetings with the Gloucester Dredging Subcommittee. The proposed disposal sites included in the ENF were a starting point, and the continuing input from the Subcommittee was crucial in assisting MCZM in identifying dredging projects and disposal sites that needed to be added, subtracted, or modified from the ENF listing of potential disposal sites.

The meetings also served the function of disseminating DMMP technical information as it became available, so that information could be reviewed as this DEIR was developed. Public presentations conducted included the following topics, as listed in Table 2-1 and described below.

Table 2-1: Gloucester Harbor DMMP Presentations/Meetings

Presentation/Meeting	Date
Dredging and Disposal Technologies	June 16, 1998
Siting Criteria and Process for Dredged Material Disposal	July 22, 1998
Regulations Governing Dredged Material Disposal/Reuse	August 20, 1998
Sediment Quality	September 9, 1998
Municipal Working Meeting #1	November 12, 1998
Municipal Working Meeting #2	February 26, 1999
Municipal Working Meeting #3	March 29, 1999
Municipal Working Meeting #4	May 11, 1999
Municipal Working Meeting #5	June 8, 1999
Municipal Working Meeting #6	June 28, 1999
Municipal Working Meeting #7	August 3, 1999
Municipal Working Meeting #8	August 26, 1999
Municipal Working Meeting #9	January 26, 2000
Screening of Potential Disposal Sites Working Meeting #1	February 3, 2000
Screening of Potential Disposal Sites Working Meeting #2	February 25, 2000
Local Informational Presentations (see below)	May - June 2000

Dredging and Disposal Technologies - This presentation provided information on the basic elements of dredging, including potential dredging technologies that could be employed in Gloucester projects, and dredged material disposal. Issues covered included: probable characteristics of dredged material; types

of disposal options for dredged material; and management practices to minimize and mitigate environmental impacts. The goal of the workshop was to inform participants of the linkage between minimizing environmental impacts with the proper planning of dredged material disposal.

Siting Criteria and Process for Dredged Material Disposal - In this presentation, the siting criteria were discussed, including avoidance of environmentally sensitive areas, compatibility with adjacent uses and minimizing exposure to important physical features. The linkage between developing comprehensive siting criteria and understanding regulatory requirements with potential locations for siting dredged material disposal within the harbor was developed. This workshop also focused on the idea that selecting potential sites for dredged material disposal should follow a logical process of using important features of the natural and built environment as a means of screening and, finally, choosing the best location to create a dredged material disposal site. This workshop provided an opportunity for local input on screening criteria and the development of City-specific site screening factors.

Regulations Governing Dredged Material Disposal and Reuse - This presentation included the introduction of information on state and federal regulations covering dredging, dredged material disposal and dredged material reuse. State and federal agency representatives gave presentations and provided review materials. Presenting agencies included: DEP, MCZM and the USACE. The intent of the presentation was to provide an explanation of the regulatory process in selecting appropriate disposal options for UDM.

Sediment Quality - The results of marine sediment tests performed under Phase I were presented. Sediment quality data were compared with criteria mandated by the USACE and USEPA. Dredged material that the federal agencies deem suitable for unconfined aquatic disposal, and the probable location of disposal sites and cost of disposal were addressed. Probable dredged material contaminants and degrees of unsuitability of sediment in the harbor were presented. The linkage between the volume of UDM and disposal site alternatives was developed in this workshop.

Working Meeting #1 - For this meeting the subcommittee discussed the specifics of the screening criteria for potential upland, alternative treatment technologies and aquatic disposal options. This meeting also involved discussion of the screening process. A goal of this meeting was to identify any additional criteria needed to address concerns or interests specific to Gloucester. The Subcommittee discussed factors that were important from a local perspective. (11/9/98)

Working Meeting #2 - The meeting involved a presentation of data collected for candidate disposal and dewatering sites. Further information on the sites presented was incorporated into the screening database. The screening criteria were discussed and finalized at this meeting to include the Subcommittee's concerns. A goal of this meeting was to gain insight into candidates disposal and dewatering sites from the City that may not have been apparent to MCZM. (2/26/99)

Working Meeting #3 & #4 - At this meeting the results of the initial screen for feasibility were presented to the Subcommittee for input. This meeting also involved discussion of the screening process and criteria. A goal of these meetings were to provide an opportunity for the Committee to comment on the results of the feasibility screen and the steps necessary to develop preferred alternatives. (3/29/99 & 5/11/99)

Working Meetings #5 & #6 - These meetings presented the results of the application of the discretionary screening criteria. Sites that were placed on the reserve list were discussed in detail. The resultant proposed candidate sites were also discussed. Considerable discussion of regional alternatives were also discussed at these meetings. A goal of these meetings were to incorporate comments on the candidate sites before application of the exclusionary screening criteria (6/8/99 & 6/28/99).

Working Meetings #7 & #8 - At these meetings, the results of the application of exclusionary screening criteria were presented to the Subcommittee. Discussion at these meetings centered around why sites were eliminated from further consideration. These meetings also involved detailed discussion of disposal of UDM at specific "sub-cell" sites (8/3/99 & 8/26/99).

Working Meeting #9 - This meeting was to follow-up on items raised at Working Meetings #7 and #8 regarding geological conditions in the vicinity of the proposed disposal sites. A detailed report of subsequent study conducted was presented. This meetings provided an opportunity for the Subcommittee to review the results of the screening process to date (1/26/00).

In addition to the above presentation and working meetings, six (6) additional meetings were held with various recreational and commercial fishing interests to gather further local input on their understanding of Gloucester Harbor and the surrounding water's (Massachusetts Bay) marine environment.

Screening of Potential Disposal Sites / Proposed Preferred Alternatives #1 & #2 - The proposed preferred alternative was presented to the subcommittee for review. These workshops were hands-on sessions, working with maps of the harbor and its various built and natural features. The use of computer overlays, facilitated the discussion at the presentation, depicting fisheries habitat, water depths, wind/wave exposure, areas of navigation and other data collected and compared it with the siting criteria developed in the Siting Criteria meeting. The intent of the session was to present results of the screening process to find a disposal site(s) of sufficient size, with minimal environmental impacts, for UDM. The subcommittee provided input on the proposed preferred alternative presented. A goal of these meetings was to incorporate final comments from the Subcommittee before presenting the results of the screening process to the federal agencies (2/3/00 & 2/25/00).

After the presentation of screening results to the Subcommittee, and incorporating comments, from the Subcommittee and the federal agencies, the DMMP information was presented by the Dredging Subcommittee Chairman in a series of informational sessions. The purpose of these informational meetings was to introduce the general public to the DMMP process, and to familiarize the public with the more technical information before this DEIR was published. The Subcommittee presented DMMP findings to

the Gloucester Waterways Board, City Council, Gloucester Fisheries Commission, and Conservation Commission. Other key Gloucester stakeholders presented with DMMP findings included lobstermen, property owners and potential dredgers. The culmination of public input at the City level was the approval by the Mayor, in a letter dated June 7, 2000, which is included in Appendix B.

Additional coordination with the Port Planning process involved attendance at public milestone meetings and interaction with the project coordinator and consultants developing the Gloucester Harbor Plan. Documentation of the above public meetings can be found in Appendix B. The documentation includes meeting notes, presentation handouts and other items.

2.5.2 Coordination with Federal Agencies

The USACE has developed a method of coordinating the review and approval time-lines of the various federal resource agencies charged with reviewing major projects involving discharges of dredged or fill material in waters of the United States, regulated under Section 404 of the Clean Water Act or activities in tidal waters regulated under Section 10 of the Rivers and Harbors Act of 1899. Based upon the mapping overlay planning methodology developed by noted landscape architect Ian McHarg in the 1960s, the USACE's "Highway Methodology" provides a valuable tool for decision making in a coordinated fashion. This methodology integrates the planning and design of a project with the requirements of the USACE permit regulations. The USACE serves as the coordinator of comments from the federal agencies, including the USEPA, the US Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS).

Participation by the USACE in the earliest stages of project planning is a key provision of the Highway Methodology. The evaluation of alternatives to the project is key to the successful completion of the methodology. Alternatives analysis are based upon the determination of the project "purpose and need" (developed under the National Environmental Policy Act (NEPA)) and the "overall/basic project purpose" required under the EPA 404(b)(1) guidelines and used by the Corps in project permitting.

The 404(b)(1) guidelines establish pass/fail environmental tests, to be completed before a determination is made on the balancing of overall project benefits versus detriments. An USEPA/USACE's Memorandum of Agreement, signed in February 1990, mandates a three-step iterative process of avoidance, minimization and mitigation of adverse impacts to wetlands functions and values (USACE, New England Division, 1993).

Application of the Highway Methodology to the Gloucester Harbor DMMP DEIR involved several key milestones including the USACE's concurrence with the DEIR Outline, Basic Project Purpose (BPP), and Aquatic and Upland Zones of Siting Feasibility (ZSFs). Documentation of the USACE's implementation of the Highway Methodology is presented in Appendix B which contains letters presenting the coordinated federal comments.

As part of the effort to coordinate closely with the federal agencies, a meeting to present draft screening results was held. This presentation was to representatives of all reviewing federal agencies, including representatives from USACE, USEPA, NMFS and USFWS, on March 29, 2000. The results of the meeting was a letter from the USACE dated April 21, 2000, (Appendix B), indicating concurrence with the screening process conducted and the proposed preferred disposal alternative put forward.

2.5.3 Coordination with State Agencies

Because of the array of permits required from the state to implement various disposal types and technologies proposed, DMMP planning has also required the close coordination with state regulatory agencies, particularly the Department of Environmental Protection (DEP), Division of Marine Fisheries (DMF) and Massachusetts Historical Commission (MHC). The broad reaching policy issues involved in the disposal of UDM have also been explored with these agencies, and will require continued coordination through the development of the FEIR. Close coordination with state agencies was essential to developing this DEIR. However, all statements and conclusions contain herein are the sole responsibility of MCZM. State agencies will be reviewing and formally commenting to MEPA on the content and conclusion of the DEIR and FEIR pursuant to their regulatory oversight responsibilities.

2.5.3.1 Department of Environmental Protection

Since Massachusetts does not have comprehensive regulations for the disposal of dredged material, DEP Divisions with jurisdiction over UDM disposal including: Wetlands and Waterways, Water Pollution Control, Waste Site Cleanup and Solid Waste Management were approached at key DMMP milestones. DEP agencies reviewed and concurred with the site selection criteria developed to ensure consistency with existing state regulations. Issues regarding upland and aquatic disposal and alternative technologies were discussed at numerous meetings, phone calls and e-mail correspondence. Representatives from DEP divisions also participated in the regulatory forum described above, to inform interested parties of requirements and expectations of the permitting process.

2.5.3.2 Division of Marine Fisheries

DMF participation in, and oversight of, investigations of marine resources conducted in support of the DMMP was invaluable to developing the detailed assessments provided in this DEIR. In its role "to maintain the diversity and abundance of marine habitats" (DMF mission statement), DMF has collected marine resource data for decades, and some of that data has been consulted in the Gloucester DMMP analysis including Fisheries Resources Survey for Gloucester Harbor (1999) and the Early Benthic Phase Lobster Survey for Gloucester Harbor. Because of the overlap of the Gloucester Harbor ZSF with that of Salem Harbor's the results of the Trawl Surveys (1978-1996) for finfish outside Salem Harbor, Marine Research Study (1967) of adult finfish, shellfish, lobster fishery and marine vegetation were incorporated into the Gloucester Harbor DMMP analysis.

The on-going coordination with DMF has played an integral role in data collection and identification of areas needing further study for the Gloucester Harbor DMMP. This working relationship has involved participation of both MCZM and DMF staff on data review and resource surveys and will continue through the development of the FEIR.

2.5.3.3 Massachusetts Board of Underwater Archaeological Resources

As the sole trustee of the Commonwealth's underwater heritage, the Massachusetts Board of Underwater Archaeological Resources (MBUAR) is committed to promoting and protecting the public's interests in these resources for recreational, economic, environmental, and historical purposes. Under Massachusetts General Law Chapter 6, sections 179-180, and Chapter 91, section 63, the Board is charged with the responsibility of encouraging the discovery and reporting, as well as the preservation and protection, of underwater archaeological resources. Because the Board's jurisdiction extends over the inland and coastal waters of the state, the siting of aquatic disposal alternatives has been sensitive to the MBUAR's charge. Ongoing communication and with the MBUAR will continue throughout the remainder of the Gloucester Harbor DMMP planning process.

